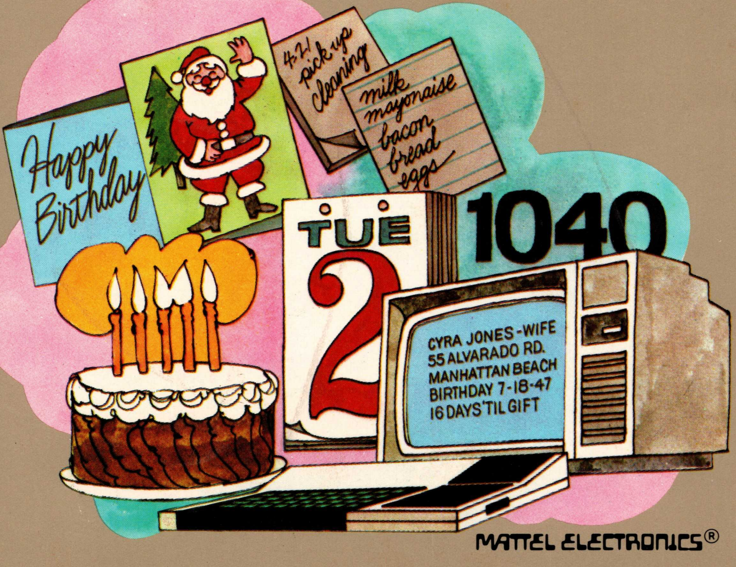
4177-0920

AQUARIUS™
HOME COMPUTER SYSTEM

# FILEFORM™

## PAGE EDITOR

# USERS GUIDE


Happy Birthday
4-2! pick up cleaning
milk mayonaise bacon bread eggs
TUE 2
1040
CYRA JONES-WIFE
55 ALVARADO RD.
MANHATTAN BEACH
BIRTHDAY 7-18-47
16 DAYS 'TIL GIFT

MATTEL ELECTRONICS®

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# INTRODUCTION

## WHAT IS FILEFORM?

Hi! Welcome to the home filing world of FILEFORM!

By just inserting the FILEFORM program cartridge into your Aquarius home computer system, you automatically turn your computer into a flexible filing and documentation system...with word processing capabilities...called the Aquarius™ FILEFORM™!

FILEFORM lets you create your own information (such as an address file or document), store this information in the computer's memory for as long as the computer is turned on, and quickly access and change this information at any moment to suit your needs.

Hook up your Aquarius™ Data Recorder™ and you have a means for PERMANENT STORAGE of information on cassette before the computer is turned off. Later, the information on cassette can be reloaded into the computer's memory for updating your records.

Hook up your Aquarius™ Printer™ and enjoy the additional convenience of having the information INSTANTLY PRINTED OUT on quality paper!

FILEFORM makes it easy for you to add, change, and delete information in the computer's memory by simply using the Aquarius keyboard CONTROL KEYS and COMMANDS.

What will FILEFORM do for you? FILEFORM will keep your address files up to date. It will keep track of your automobile maintenance records, your insurance billings, your family's medical history, your mailing lists, your children's school supplies and class schedule charts, your personal appointments — you name it!

Entertainment? How about indexing your record and video tape collection?

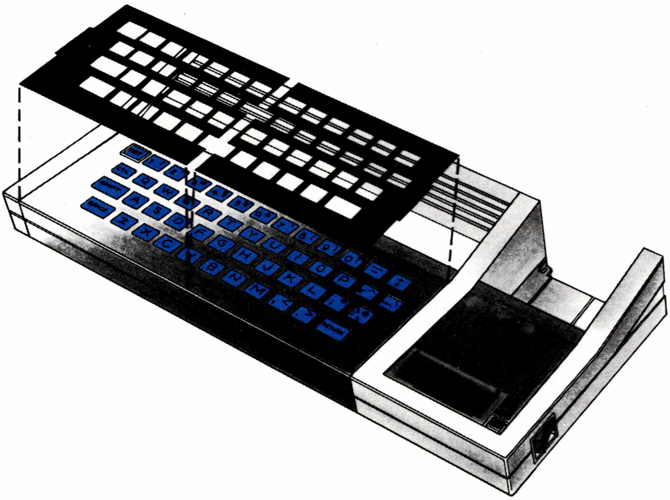
FILEFORM can also be used to quickly find the one piece of information in your file that you're looking for, or reorganize your records for effective handling.

Use FILEFORM commands to: search through a file for a particular tabulation, section number, sentence, recipe, name, or date; to enter new data, delete old data, shift data around, format or reformat blocks of data; or to keep your file ACCURATE and ALIVE at all times!

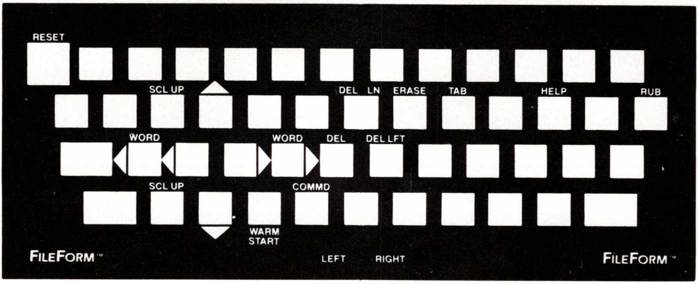
For additional information refer to the AQUARIUS™ Home Computer User's Guide, the AQUARIUS™ Data Recorder Instructions, or the AQUARIUS™ Printer Instructions, each sold separately and available from Mattel Electronics.

## CHAPTER 1

# USING YOUR FILEFORM CARTRIDGE


CTRL
SHIFT
SPACE
Q
W
E
R
T
Y
U
I
O
P
A
S
D
F
G
H
J
K
L
Z
X
C
V
B
N
M
RETURN

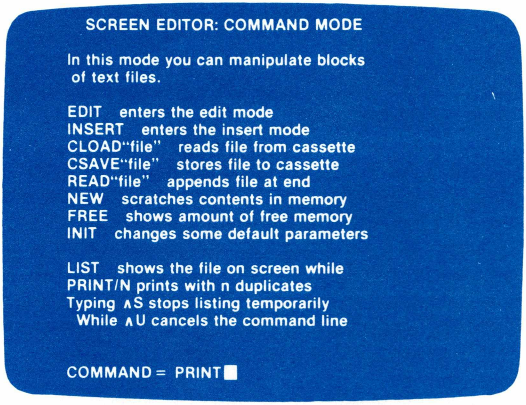
Your Aquarius™ home computer comes with a plastic overlay that fits over the keyboard. This overlay is your guide to keys that will perform FILEFORM™ editing functions when these keys are pressed TOGETHER WITH the CTL key. The editing function is printed on the overlay ABOVE the key to be used with the CTL key. Details on how these keys work are in Appendix B.


RESET
SCL UP
DEL LN
ERASE
TAB
HELP
RUB
WORD
WORD
DEL
DEL LFT
SCL UP
COMMD
WARM START
FILEFORM™
LEFT
RIGHT
FILEFORM™

## GETTING STARTED

**CAUTION:** To avoid possible damage to your Aquarius computer and your FILEFORM cartridge, always make certain that the Aquarius computer's ON/OFF switch is set to OFF before inserting or removing the cartridge.

The moment you power up (or reset the system), the "FILEFORM" title appears on the screen. Press RTN, or wait a couple of seconds for the screen to place you in the "Command Mode". This is your starting point!



```
SCREEN EDITOR: COMMAND MODE

In this mode you can manipulate blocks
 of text files.

EDIT   enters the edit mode
INSERT   enters the insert mode
CLOAD"file"   reads file from cassette
CSAVE"file"   stores file to cassette
READ"file"   appends file at end
NEW   scratches contents in memory
FREE   shows amount of free memory
INIT   changes some default parameters

LIST   shows the file on screen while
PRINT/N prints with n duplicates
Typing ∧S stops listing temporarily
  While ∧U cancels the command line


COMMAND = PRINT█
```

COMMAND MODE LOOKS LIKE THIS

## THREE SPECIAL KEYS!

**RTN** Short for RETURN, it is the key that makes things happen. It tells FILEFORM to carry out or execute a command, terminate a line in a record, or insert lines of space between records.

TO EXECUTE A COMMAND, ALWAYS PRESS RTN AFTER TYPING THE COMMAND.

**CTL** The key marked CTL is called the CONTROL key. It is used mostly to move the cursor on the screen to perform editing functions and must always be pressed simultaneously with another key. To use the CTL key, always HOLD IT DOWN while pressing the other key — the same way you use the SHIFT key to type upper case characters. For example, CTL-C (also written "∧C" and read "CONTROL C") means that you must hold CTL down while pressing C.

**RST** The only white key on your keyboard, it is used to RESET FILEFORM...sending you back on the screen to the "FILEFORM" title. Pressing RST will not erase the contents in your Aquarius' memory if within 2 seconds you also press CTL-C. Pressing CTL-C after RST, saving the memory, is called "Warm Start," while pressing RTN after RST, erasing the memory, is called "Cold Start." Refer to end of this Chapter for more details.

## MODES OF OPERATION

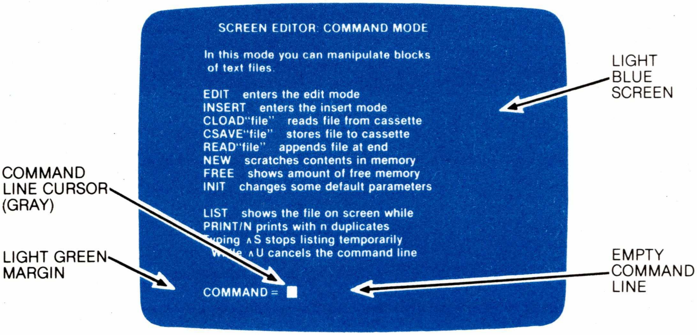
There are three modes of operation: Command, Insert, and Edit.

Think of these modes as three different TV channels. YOU CONTROL what happens on each channel! And you can switch modes of operation as you would switch TV channels — but searching for something you want to do, rather than for something you want to watch!

You'll soon find out that there are certain things you can do only in a particular mode (channel). In order to do something else, you'll need to switch modes!

Switching modes is a bit different from switching channels on your TV. What you do depends on which mode you're in...and which mode you want to go to. To know how to do it right and quickly, turn to the handy chart provided in Appendix D.

Let's take a good look now at each mode on your TV screen:


```
SCREEN EDITOR: COMMAND MODE

In this mode you can manipulate blocks
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INSERT   enters the insert mode
CLOAD"file"   reads file from cassette
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READ"file"   appends file at end
NEW   scratches contents in memory
FREE   shows amount of free memory
INIT   changes some default parameters

LIST   shows the file on screen while
PRINT/N prints with n duplicates
Typing ∧S stops listing temporarily
 While ∧U cancels the command line

COMMAND = █
```
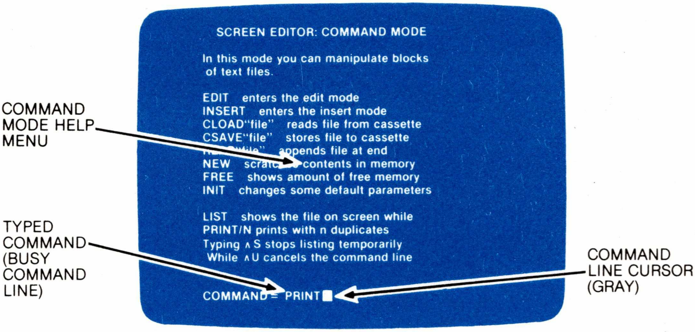
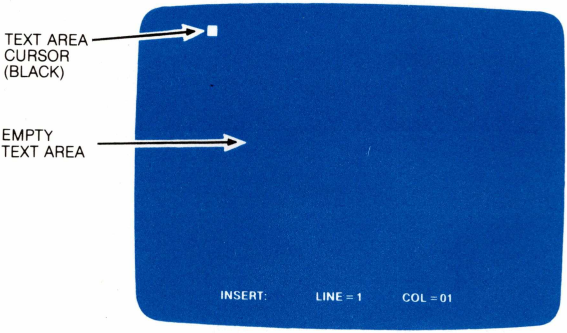
LIGHT BLUE SCREEN
COMMAND LINE CURSOR (GRAY)
LIGHT GREEN MARGIN
EMPTY COMMAND LINE

COMMAND MODE — BEFORE TYPING A COMMAND

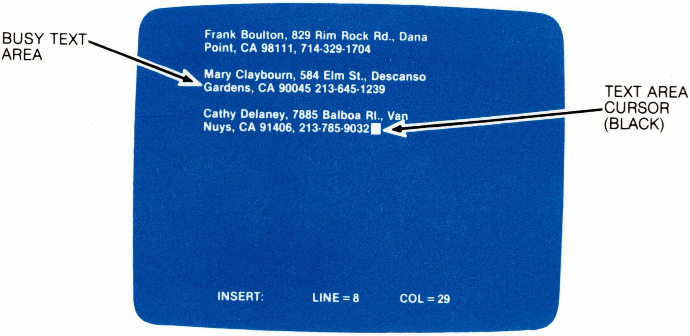

```
SCREEN EDITOR: COMMAND MODE

In this mode you can manipulate blocks
 of text files.

EDIT   enters the edit mode
INSERT   enters the insert mode
CLOAD"file"   reads file from cassette
CSAVE"file"   stores file to cassette
READ"file"   appends file at end
NEW   scratches contents in memory
FREE   shows amount of free memory
INIT   changes some default parameters

LIST   shows the file on screen while
PRINT/N prints with n duplicates
Typing ∧S stops listing temporarily
 While ∧U cancels the command line

COMMAND = PRINT█
```
COMMAND MODE HELP MENU
TYPED COMMAND (BUSY COMMAND LINE)
COMMAND LINE CURSOR (GRAY)

COMMAND MODE — AFTER TYPING A COMMAND BUT BEFORE PRESSING RTN


TEXT AREA CURSOR (BLACK)
EMPTY TEXT AREA

```
INSERT:          LINE = 1          COL = 01
```

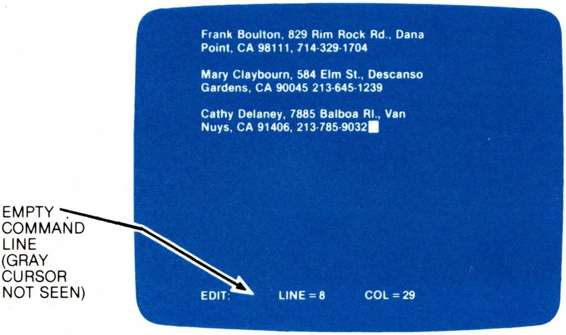
INSERT MODE — BEFORE TYPING TEXT MATTER


BUSY TEXT AREA
TEXT AREA CURSOR (BLACK)

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239

Cathy Delaney, 7885 Balboa Rl., Van
Nuys, CA 91406, 213-785-9032█
```

```
INSERT:          LINE = 8          COL = 29
```

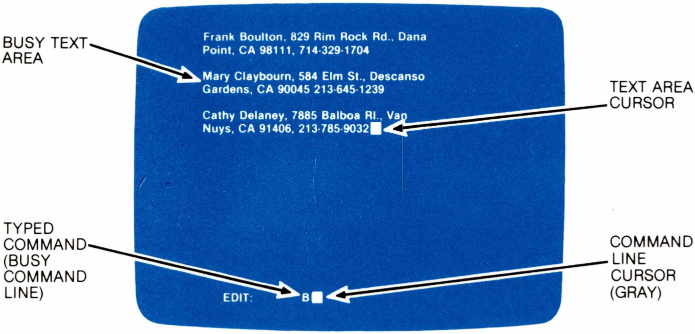
INSERT MODE — AFTER ADDRESS FILE HAS BEEN TYPED



```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239

Cathy Delaney, 7885 Balboa Rl., Van
Nuys, CA 91406, 213-785-9032█









EDIT:           LINE = 8        COL = 29
```

EMPTY COMMAND LINE (GRAY CURSOR NOT SEEN)

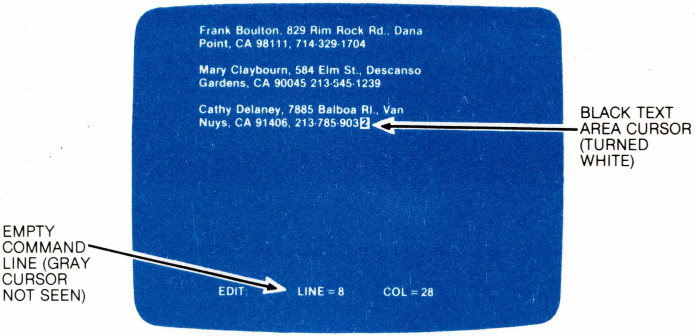
EDIT MODE — BEFORE TYPING A COMMAND



```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239

Cathy Delaney, 7885 Balboa Rl., Van
Nuys, CA 91406, 213-785-9032█









   EDIT:        B█
```

BUSY TEXT AREA
TEXT AREA CURSOR
TYPED COMMAND (BUSY COMMAND LINE)
COMMAND LINE CURSOR (GRAY)

EDIT MODE — AFTER TYPING A COMMAND BUT BEFORE PRESSING RTN



```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-545-1239

Cathy Delaney, 7885 Balboa Rl., Van
Nuys, CA 91406, 213-785-9032

   EDIT:          LINE = 8        COL = 28
```

BLACK TEXT AREA CURSOR (TURNED WHITE)

EMPTY COMMAND LINE (GRAY CURSOR NOT SEEN)

EDIT MODE — AFTER TYPING A COMMAND AND AFTER PRESSING RTN

Notice on your TV screen that there are two colored areas for each mode. One is a large, centered, light-blue area which can display either a mode menu, a list of records, or the file you are currently working on. The other is the surrounding light-green margin whose bottom part contains from left to right: the mode identification, the Command Line, the Command Line cursor, and both the text area cursor line and column position indicators. These are all explained in the following sections.

Things to know about each mode:

**COMMAND MODE:** This is the mode you fall into right after powering up (or resetting the system and pressing RTN ). This is your STARTING mode! From here you can go anywhere. Also, this is the only mode where a Help Menu is constantly displayed on the blue screen.

At the bottom, green margin, exists the Command Line, which is the Command Mode working area. Just ONE LINE to work on! And a short one!

Commands used in the Command Mode come directly from the Command Mode Help Menu (also listed in Appendix A). Here are two examples:

| | |
|---|---|
| LIST | lists file on screen from memory |
| CSAVE ''file'' | saves file to cassette from memory |

**INSERT MODE:** This is the most often used mode of operation. Here you enter your text on the ENTIRE BLUE SCREEN. The keys you use most frequently are the CTL and RTN keys. Since there is no Command Line in this mode, no commands are executed here.

Most of the CTL uses in this mode have to do with moving the cursor around the screen. Since the cursor shows you where the next character you type will appear, moving the cursor allows you to position text anywhere within the blue screen.

**Example:**

```
June Kennedy, 2235 Vine St., Apt■
```

Some CTL uses deal with switching from one mode to another. Still other uses refer to scrolling the screen up and down, or reaching for a particular menu.

**Example:**

| | |
|---|---|
| CTL-C | takes you from the Insert Mode to the Edit Mode, or from the Edit Mode to the Command Mode |
| CTL-Z | scrolls text down 1/2 screenful |
| CTL-P | displays the Help Menu corresponding to the mode you are in (Insert and Edit Modes only) |

Remember that CTL-C has other special functions. We will mention them as we go along. To know all possible combinations and uses, check the Insert Mode Menu on your screen by pressing CTL-P in the Insert Mode or turn to Appendix B in this manual.

**EDIT MODE:** This is the mode to switch to when you want to edit text that you entered in the Insert Mode. You can do single or multiple editing functions quickly with the use of a single command. Here the Command Line becomes the main area of work. However, work done on the Command Line relates directly to text displayed on the large blue screen and all uses of the CTL key in the Insert Mode apply just the same here.

The Edit Mode is the only mode that has two cursors — a black one for text use on the blue screen and a gray one for Command Line commands on the green margin. Both cursors can appear at the same time, however, only one of them can actually be activated by editing functions at one time. (Once a command is being typed on the Command Line, for example, it must be completed, or erased totally, before the cursor on the text area can be activated.)

Commands used in the Edit Mode come directly from the Edit Mode Help Menu (also listed in Appendix C). To reach the Edit Mode Help Menu, press CTL-P in the Edit Mode. Here are two examples of Edit Mode commands:

| | |
|---|---|
| B | moves cursor to bottom line of file |
| K | deletes text from cursor to end of paragraph |

Tips on how to use the CTL key on both the text area and the Command Line of the Edit Mode can be found in the Insert Mode Help Menu, or Appendix B. To reach the Insert Mode Help Menu from the Edit Mode, you must first switch to the Insert Mode, then get the menu from there!

## TYPED COMMANDS

Commands are instructions entered on the Command Line in either the Command Mode or the Edit Mode.

Entering a command means TYPING the command message and then pressing RTN. So entering the INSERT command, for example, means typing INSERT and pressing RTN.

To make it simple in this manual, we'll indicate it this way:

INSERT RTN

ALWAYS PRESS RTN AT THE END OR THE COMMAND WON'T BE EXECUTED!

## THE TWO CURSORS!

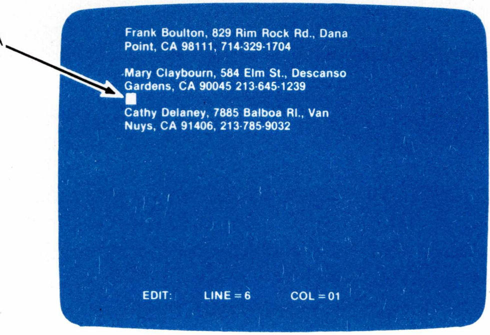
Notice that there are TWO DIFFERENT square-shaped cursors! One is black and appears on the TEXT AREA (blue screen) of both the Insert Mode and the Edit Mode, as this TEXT AREA remains the same in both modes. When the cursor is positioned over a character, the black turns white so the character can be seen. In the Insert Mode, this cursor moves to the right of the character being typed. In the Edit Mode, it moves to the location SPECIFIED by the command just typed!

The other cursor is gray and appears on the COMMAND LINE (bottom green margin) of either the Command Mode or the Edit Mode. This cursor always moves to the right of the character being typed — but cannot be positioned over a character already typed, and therefore doesn't have to change color.

The text area cursor is always present on the screen. With no text on the screen, it occupies the "LINE = 1 COL = 01" indicated position. With text on the screen, it will be positioned exactly where the last editing control key or command execution placed it. Switching from the Insert Mode to the Edit Mode, and back, does not cause the cursor or the text to move.

The Command Line cursor, however, behaves differently. In the Command Mode, it is always present, occupying the leftmost position. In the Edit Mode, it appears only WHEN a command is being typed, starting with the leftmost position.

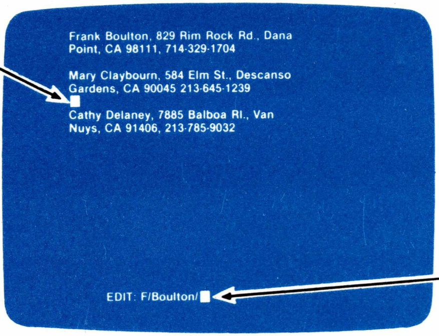
Note in the following illustrations how the two cursors can appear together in the Edit Mode and how they interrelate when a command is entered. Don't worry about the command entered in the second illustration yet. We'll discuss it later in Chapter 3.



TEXT AREA
CURSOR
(BLACK)

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239
█
Cathy Delaney, 7885 Balboa Rl., Van
Nuys, CA 91406, 213-785-9032




    EDIT:      LINE = 6        COL = 01
```

BEFORE COMMAND IS TYPED

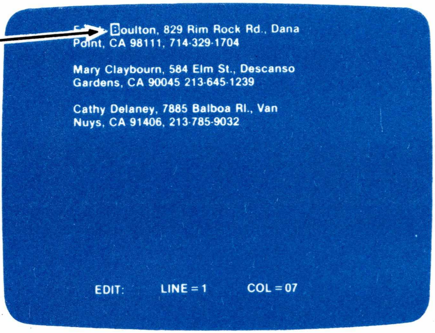


TEXT AREA CURSOR (BLACK)

COMMAND LINE CURSOR (GRAY)

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239
█
Cathy Delaney, 7885 Balboa Rl., Van
Nuys, CA 91406, 213-785-9032



         EDIT: F/Boulton/█
```

WHILE COMMAND IS BEING TYPED



TEXT AREA CURSOR (WHITE-ON-BLACK)

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239

Cathy Delaney, 7885 Balboa Rl., Van
Nuys, CA 91406, 213-785-9032



   EDIT:        LINE = 1        COL = 07
```

AFTER COMMAND IS EXECUTED

In the Edit Mode, as work progresses, typed commands will push the gray cursor to the right on the Command Line. Then typed commands will send the black cursor to specified locations on the text area through the ENTIRE file!

## CAPITAL LETTERS!

You don't have to type keywords (like "PRINT" in a command) or keyletters (like "c" in the command "c/June's/Anne's/100" or "D" in "CTL-D") in upper case letters. Aquarius automatically stores them in UPPER CASE LETTERS, no matter how you type them. So don't worry, just type them! The same is true for the name of a file you enclose in quotation marks when entering a command (like CLOAD "nutrit").

However, you must type Insert Mode text (anything entered on the blue screen) and Edit Mode Command Line text (like "June's" and "Anne's" in the above example) the exact way you want it to appear.

Again, let's not worry yet about the meaning of the commands just illustrated. We'll talk about that later.

## MEMORY FULL WARNING MESSAGE

In the Insert Mode or Edit Mode, when you begin to run out of memory, FILEFORM momentarily displays a "Memory full!" message on the Command Line. Then, FILEFORM displays the following message for a few seconds:

```
There are 128 bytes left
```

NOTE: A byte equals one typed character.

The actual number of bytes indicated in this message may vary slightly, but the meaning is clear: You have reached the point where you must stop and save the contents in memory to cassette! (Then, you may erase your memory and start over.)

## TURNING FILEFORM™ OFF

After using FILEFORM for a while, turning the power off not only stops the FILEFORM working for you but it ERASES EVERYTHING. So before turning the power off, all data stored in the computer's memory should be COPIED to cassette. (Make sure you read Chapter 7 on storing your data.) And remember, only cassette files CREATED by FILEFORM can be recognized and used by FILEFORM!

Pressing RST, and then RTN, has the same effect as turning off the power: you erase your Aquarius computer's memory! But pressing RST alone won't erase your memory. If you press it by mistake, press CTL-C (instead of RTN), and you're back in business! Your computer's memory won't be lost!

## REMEMBER!

Starting over while erasing your memory (''Cold Start''):

RST RTN

or RST and wait about 2 seconds

Starting over while saving your memory ("Warm Start"):

RST CTL-C

When is a "Warm Start" useful?

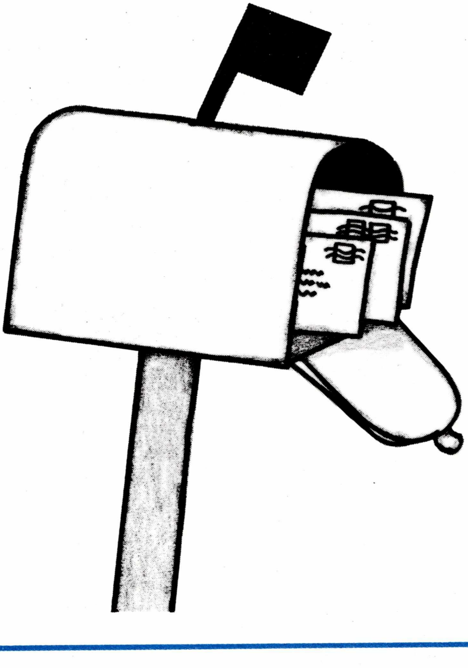
1. When you pressed the RST key by mistake.

2. When your computer experienced a "system crash." This means that Aquarius overloaded — it had a "nervous breakdown." If a program is running, it stops. No key on the keyboard works...except RST.

3. When you forgot to plug in or turn on your printer or cassette recorder and FILEFORM just waits for a response...that obviously cannot come.

# CHAPTER 2

# CREATING A FILE



To create an address file, if you start from scratch, power up first. Then, press RTN or wait about 2 seconds until FILEFORM takes you to the Command Mode — your starting point!

If you were already using FILEFORM and want to erase the entire memory from whatever place and mode you are in, press RST first to reset the system. This will take you back to the "FILEFORM" title. Then press RTN.

To create an address file, or any text, you must switch to the Insert Mode. Your Command Mode Help Menu tells you that the INSERT command will switch you there. So enter your command on the Command Line:

INSERT RTN

Now you are in the Insert Mode. Type anything you want to create. For example:

Bob Abrams RTN
1884 Los Osos Dr. RTN
Big Rock, CA 92624 RTN
213-842-1024 RTN RTN

Julie Ackman RTN
3426 Rose St., #6 RTN
Culver City, CA 90357 RTN
213-399-0145 RTN

*Remember to press* RTN *whenever you want to jump to the next line. Press* RTN *twice if in addition you want to insert a line of space. Press* RTN *once for each line of space you want to insert.*

This way of typing records is called "Block Style." For other ways, turn to Appendix E.

## LINE CONTINUATION

When you type continuously on a line WITHOUT PRESSING RTN, the text automatically continues on the next line. This is called ''wrapping around.''

Exception To The Rule:

Whenever you enter a space on a line after column 35, the cursor first positions the space on the line, then automatically jumps down to the beginning of the next line so you can continue typing.

For example:

Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

It may look to you as though FILEFORM is leaving a lot of blank space on the screen sometimes. Don't worry. FILEFORM keeps track of the number of spaces that you ACTUALLY enter, so when you print the address, it appears on one line.

Remember that FILEFORM allows you to continuously type text between column 1 and column 38, as long as you don't type any space on column 36, 37, or 38 (also called the ''hot zone''). If you do get past column 35, into the hot zone, but your word being typed cannot be completed on this line (because it's too long), FILEFORM automatically continues the word for you on the next line. FILEFORM displays a pound sign (#) in column 39 to visually indicate that this word has been continued on the next line.

For example:

```
Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

## CHAPTER 3

# UPDATING A FILE

# SCANNING YOUR FILE QUICKLY

Whenever you get started with your work, the first thing you want to do is scan your file to locate specific information. There are three ways you can scan, depending on your needs.

## SEEING EITHER END OF YOUR FILE IN A HURRY

1. Switch to the Edit Mode.

2. Enter the T command to see the top of your file:

```
T [RTN]
```

3. Enter the B command to see the bottom of your file:

```
B [RTN]
```

## SEEING YOUR ENTIRE FILE ONE SCREENFUL AT A TIME

1. Switch to the Command Mode.

2. Enter the LIST command to display the contents of your file, starting at the top.

```
LIST [RTN]
```

**3.** Press ANY KEY, except RST, CTL, or SHIFT, to display the next screenful. And so on.

**4.** Terminate the listing (exit the listing) by pressing RST, then CTL-C.

## SEEING YOUR ENTIRE FILE HALF A SCREENFUL AT A TIME

**1.** Switch to the Insert Mode or Edit Mode.

**2.** To scroll the text up, press CTL-W.

**3.** To scroll the text down, press CTL-Z.

## LOCATING SPECIFIC INFORMATION IN YOUR FILE QUICKLY

To locate a specific item, like a name or a date, in a hurry, you must be in the Edit Mode. Here is where you can use a SINGLE command to accomplish this.

A quick inspection of the Edit Mode Help Menu or Appendix C tells you that the F command is the command you need.

The F command allows you to INSTANTLY ADVANCE the text CURSOR to the beginning of a "word" or "group of words" (called "character string" or simply "string") anywhere in your file. The "word" or "group of words" specified in the F command must IDENTICALLY MATCH (lower case letters, upper case letters, spacing between words) the "word" or "group of words" you're trying to locate in your file.

The F command can be entered either way:

```
        F/string/
    or  F–/string/
```

When entering F/string/, FILEFORM will search the string STARTING AT the cursor position and all the way to the RIGHT END of the file.

When entering F–/string/, FILEFORM will search the string STARTING one character to the left of the cursor and moving to the LEFT all the way to the BEGINNING of the file.

Suppose you want to search for the address record of Frank Boulton. Here is how you do it:

**1.** Make certain you are in the Edit Mode.

**2.** Check the position of the cursor in the file on your screen. If you are at the beginning of the file, with the cursor positioned over the first character (topmost, leftmost position on the screen), Frank Boulton can only be found to the right of the cursor. Enter the F command properly:

```
F/Frank Boulton/ RTN
```

**3.** In response, FILEFORM will advance the cursor to the "F" of Frank Boulton, which you'll see on the screen.

If you have more than one Frank Boulton in your address file, FILEFORM will advance the cursor to the FIRST one encountered.

If you don't have a record for Frank Boulton, FILEFORM won't advance the cursor anywhere. But it will send you this message:

```
String not found!
```

**4.** If you are midway in the file, the cursor positioned on LINE = 103, COL = 07, for example, Frank Boulton can be found either side of the cursor. If you want to search toward the end of the file, you enter the F command like before:

```
F/Frank Boulton/ [RTN]
```

If you want to search toward the beginning of the file, you enter the F command like this:

```
F – /Frank Boulton/ [RTN]
```

Or, rather than searching one direction and then the other to cover the entire file, you can just enter either the T command to send the cursor to the beginning of the file or the B command to send the cursor to the end of the file, and act from here.

## EDITING YOUR FILE

Whether you update at the same time as you create the address file (before turning off FILEFORM) or a month later (after saving it on cassette), you'll stay primarily in the Insert Mode. Here is where you can use your cursor control keys to edit the text. Here you'll do things one or two steps at a time, using your own imagination.

When you want to do big editing jobs quickly, involving numerous or simultaneous operations within the entire file with the use of a single command — you'll switch to the Edit Mode. Switch back to the Insert Mode to continue. Or visit the Command Mode to perform other things not directly related to changing text.

Suppose you are in the Insert Mode now. By pressing CTL-P, you can at any moment check the Insert Mode Help Menu and pick up some quick tips about what to do with certain control keys. Or you can turn to Appendix C for more detailed information.

Also, to supplement your knowledge of cursor behavior, screen wrap-around, line development, and carriage return formatting during editing, turn to Appendix E.

## EDITING IN THE INSERT MODE

## INSERTING LINES OF SPACE

Suppose that you want to separate two records. You'll have to insert one or more lines of space.

To do that, simply move the cursor to the end of the first record or to the beginning of the second record, and press RTN once for a line, twice for two, and so on.

Here is how your records look before, during, and after editing:

Before Editing:

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704
Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

During Editing:

*Position cursor here.*

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704█
Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

*Or here.*

After Editing:

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

Notice how lines scroll down to fill in each line insertion.

## INSERTING RECORDS

Suppose that you want to insert the address record for Mary Claybourn in your address file. You would like the address information to appear in ALPHABETICAL order.

Here is what you do:

1. Make certain you are in the Insert Mode.

2. Scroll up or down your address record on the screen to focus on the two "last names" between which Claybourn should be inserted. In your case, you find them to be Boulton (above) and Delaney (under).

3. Here is how your address records look before, during, and after editing:

Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Cathy Delaney, 7885 Balboa Bl., Van
Nuys, CA 91406, 213-785-9032

During Editing:

Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704
■
Cathy Delaney, 7885 Balboa Bl., Van
Nuys, CA 91406, 213-785-9032

*Position cursor here. Press* RTN *once to insert a line of space. Type the record. Press* RTN *at the end of the record.*

*After Editing:*

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239

Cathy Delaney, 7885 Balboa Bl., Van
Nuys, Ca 91406, 213-785-9032
```

## INSERTING SPACES BETWEEN WORDS

Position the cursor over the character before which you want to insert the space (or separate words).

Before Editing:

```
SusanWirtz, 824 Old Oak Dr., Calabasas#
, CA 94231 805-845-9123
```

During Editing:

```
SusanWirtz, 824 Old Oak Dr., Calabasas#
, CA 94231 805-845-9123
```

After Editing:

```
Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

# INSERTING INFORMATION IN A RECORD

Suppose that you want to insert an apartment number in a particular record in your address file.

Position the cursor at the point where you want the insert to begin, and start typing.

Note how the text (from the cursor position to the next RTN) is pushed to the right once for each character you type.

Here is the sequence:

Before Editing:

```
Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

During Editing:

```
Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

*Position cursor here. Type the apartment number from this position.*

After Editing:

```
Susan Wirtz, 824 Old Oak Dr., Apt. 223#
G, Calabasas, CA 94231 805-845-9123
```

Note: Upon completing the insertion, the cursor is still positioned at the beginning of "Calabasas." The # sign at the end of the first line has now broken the apartment number just entered, causing the "G" to continue in the beginning of the next line.

## EDITING IN EITHER THE INSERT MODE OR EDIT MODE

## DELETING LINES OF TEXT

To delete a line, simply position the cursor anywhere on the line. Then, press CTL - Y.

Notice how lines scroll up to fill in each line deletion.

## DELETING RECORDS

From time to time you may want to remove records from your file.

For example, suppose that Mary Claybourn gets married and sells her home. You need to insert a new address record for Mary and her husband in your file (which will require a different alphabetic location, since she'll be using her husband's last name), and delete the address record for Mary's old address.

Here is the sequence of events:

Before Editing:

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239

Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

During Editing:

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90045 213-645-1239

Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

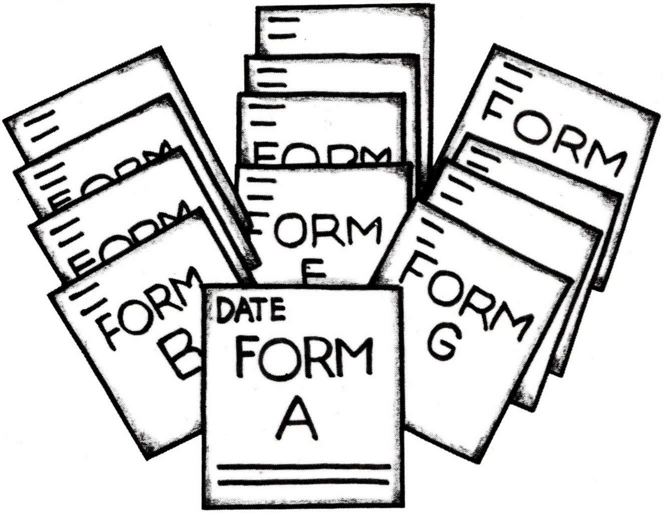
*Position cursor here. Press* CTL - Y *once for each line to be deleted (3 times in this case).*

After Editing:

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

# SHIFTING RECORDS AROUND

If you have your Aquarius™ Mini Expander™ connected to your Aquarius computer, FILEFORM allows you to rearrange blocks of text within the document currently in memory. Turn to Appendix E for details on shifting records around.


FORM
FORM
FORM
FORM B
FORM E
DATE
FORM A
FORM
FORM G

# CHAPTER 4

# MAKING GLOBAL CHANGES IN A FILE

Sometimes you'll want to change one word everywhere in your file. Or just beginning at a certain point in your file. If your file has 300 places where you must change the word, you wouldn't want to change the word one place at a time? FILEFORM can do that for you with one single command and instantly!

Sometimes you'll want to change a group of words or a phrase in 300 places in your file. FILEFORM will do it the same way. These changes are called "global changes."

Here is how FILEFORM does it:

Suppose that you, Carol, and your French teacher, Denise, share recipes. One day, you decide to swap recipes. Since you both have Aquarius computers and have been keeping your recipes in FILEFORM files, you swap the recipes on cassette.

Now you own Denise's cassette, and her recipes which she calls "miumm". You can't wait to read them. So you load "miumm" into Aquarius' memory the way discussed in Chapter 8:

```
CLOAD "miumm" [RTN]
```

And find out, after scanning the recipes, that she's been prenaming every recipe title "Denise's Glorious"...as "Denise's Glorious Poisson D'Or."

Not ideal for you. So you will change "Denise's Glorious" to "Carol's Enchanting" this way:

1. You switch to the Edit Mode to enter the T command, which will take you to the top of the recipe list:

```
T [RTN]
```

**2.** You enter the C command, which you read while checking the T command in the Edit Mode Help Menu. You've noticed that the change you want to make will have to be repeated in 86 places. You're not sure you counted well, though. The number could be 87...or 88. To make sure, you're going to use 100. You enter the C command properly:

```
C/Denise's Glorious/Carol's Enchanting/100 RTN
```

But, as you start typing the command, you realize it won't fit on the Command Line.

Common sense tells you (and you're right) that you can enter everything in two smaller commands, one after the other.

So you enter the first C command this way:

```
C/Denise's/Carol's/100 RTN
```

You know that wherever "Denise's" was in the recipes, there is "Carol's" now.

So you enter the second C command this way:

```
C/Glorious/Enchanting/100 RTN
```

And you know that wherever "Glorious" was in the recipes, there is "Enchanting" now. And that fish recipe you read before, will read "Carol's Enchanting Poisson D'Or" from now on!

The C command is used similarly to the F command. When searching toward the beginning of the file from the cursor position, the C is typed C- (or c-, in lower case). Anything written between two slashes is called a "character string" or simply a "string." The first string directly behind the "C" is called "search string," because FILEFORM searches for it. "Denise's," for example, was a search string. The second string is called "replacement string," because FILEFORM replaces the search string with it. "Carol's" was a replacement string. So was "Enchanting."

Your file changes instantly after entering a C command. Text between RTN's automatically adjust to accommodate the change. That is, text moves to the left to fill in spaces if the replacement string contains fewer characters than the string to be replaced. Similarly, text moves to the right to make room for the additional characters if the replacement string contains more characters than the string to be replaced. (FILEFORM talks in string language, too. That's why we bother with it at all.)

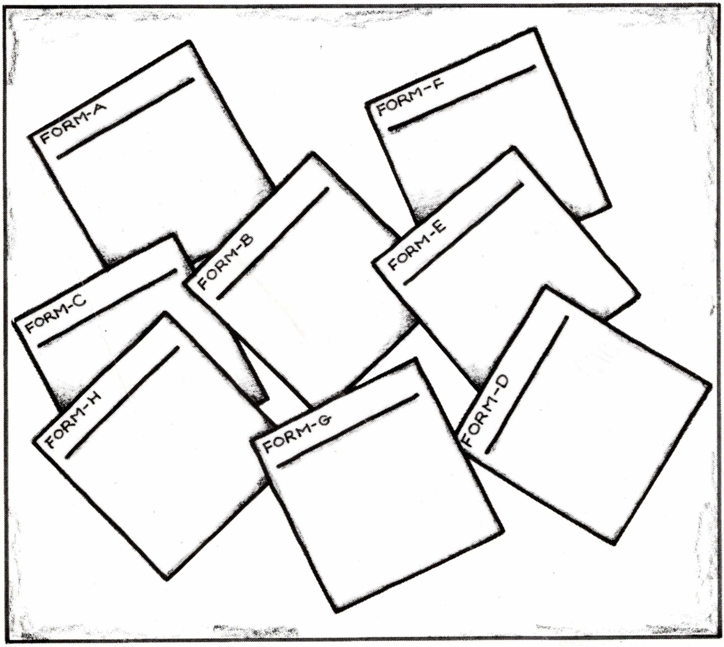
When you tell FILEFORM to search for 100 places, when you only have 86 or so in the file, you're making FILEFORM work a bit harder for you. But that's OK. FILEFORM doesn't mind. It will send you this message, though, displayed very briefly:

```
String not found!
```

Which means, rightly so, there is no string beyond the valid 86 places!

## CHAPTER 5

# UPDATING STANDARDIZED FORMS


FORM-A
FORM-F
FORM-B
FORM-E
FORM-C
FORM-H
FORM-G
FORM-D

Suppose that you're the manager of your apartment building. You would like to keep track of who is living in your apartments, and who has or hasn't paid his rent for the current month.

Using FILEFORM, you can create a rent log form that you will store on cassette. Each month you load the rent log form into memory, and edit the file to change the names of the occupants, and occasionally note rent increases.

For example, your standardized form might look something like this:

SEPTEMBER 1982 RENT LOG

| Apt. | Rent | Date Paid | Occupant |
|---|---|---|---|
| 1 | 450 | | Bradley |
| 2 | 510 | | Martin |
| 3 | 490 | | Atwood |
| 4 | 480 | | Gardiner |

Note that the month and year (top of form) are "place holders" for the actual month and year.

Columns should begin at tab stops, to facilitate your entries. Starting in column 1, tab stops are located on the screen every 8 spaces. Whenever you press `CTL`-`I` in either the Insert Mode or the Edit Mode, the cursor advances to the next tab stop to the right.

Here is what you do for every month, for instance:

**1.** Get the cassette from your library shelf containing the "general rent log format" you created, under the particular name you assigned to it. Like "geRent."

**2.** Load into memory as discussed in Chapter 8.

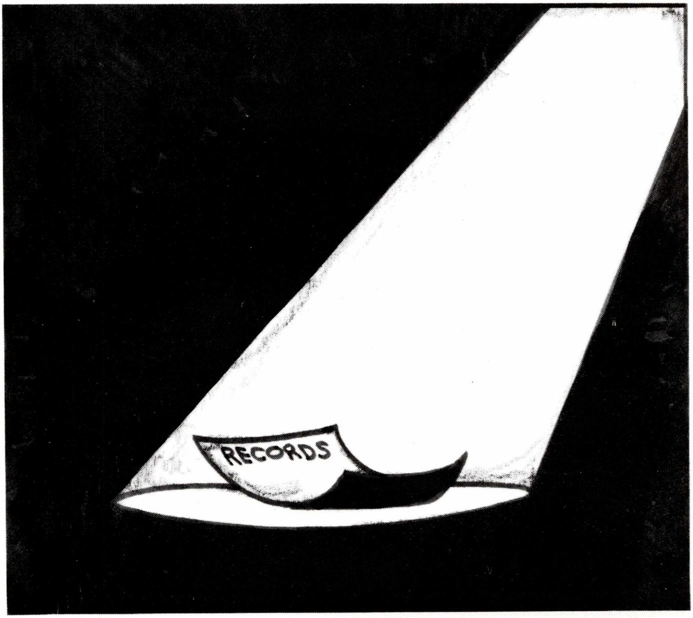
**3.** Locate position in file quickly as discussed in Chapter 3.

**4.** Press CTL-I to advance the cursor to the beginning of the column in which you want to enter or edit information, such as the date the rent was paid.

**5.** After filling in the information, save the file on cassette as discussed in Chapter 7. Give your file a unique name that will identify the rent log for that month!

# CHAPTER 6

# HIGHLIGHTING RECORDS



You may wish sometimes to highlight certain records, make them stand out from the rest, or produce a special effect for various reasons.

All you have to do is continuously press a key, like an asterisk or a hyphen, realizing that it takes a separate line from the text to do it.

```
Carol's Enchanting Strawberry Cake
----------------------------------
```

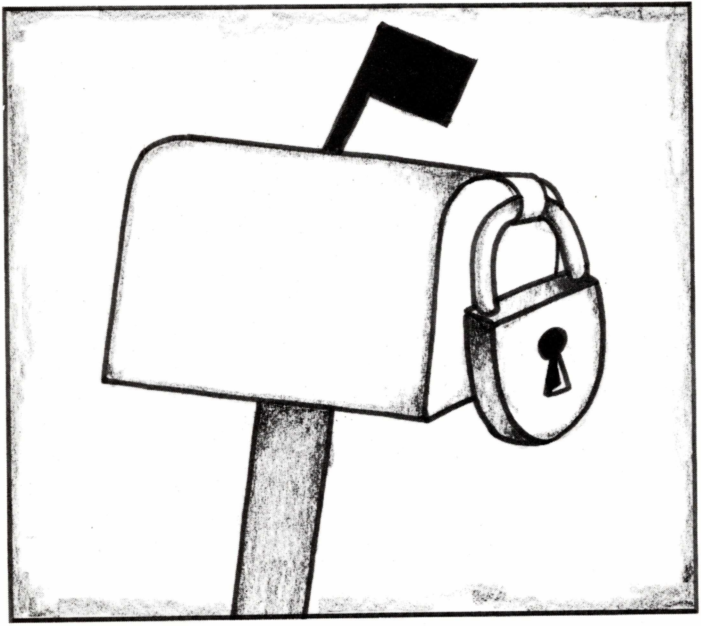
```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111, 714-329-1704

************************************
Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
************************************
```

```
9/23/82 - oil, lube, filter 24,650
          tune-up, changed fan belts
          & A/C hoses.
```

```
//////////////////
next oil change 2/83
//////////////////
```

# CHAPTER 7

# SAVING A FILE ON CASSETTE FROM COMPUTER MEMORY



To save (record) anything on cassette you must be in the Command Mode.

Normally, you will add a file to a cassette already containing several files. You may start a new cassette, however, or erase a file in an old cassette to fit a new file. In any case, you must first give whatever you're going to save a FILE NAME.

File names may contain up to 6 characters, and must be enclosed in quotation marks. Any combination of alphabetic, numeric, and special characters may be used, except quotation marks.

To keep track of specific locations on tape, such as a file starting point or a file end point, your Data Recorder has a built-in tape counter capable of reading up to 999 digits of tape travel. The starting point from which FILEFORM SAVES or LOADS an address file is called the LOAD POINT.

Keep a LOG of the files stored on each cassette: the file name (with a brief description of what it means), and the tape counter readings for the load point and end point for each file. And always SEPARATE files by at least 2 numbers on your tape counter, so files won't overlap accidentally!

Also, note that some cassettes have an unusable leader at the beginning, while others don't. In any case, you should always REWIND a cassette to the BEGINNING and RESET the tape counter to ZERO when using it so you can accurately keep track of load points and end points for files in use.

IMPORTANT: USE ONLY HIGH-QUALITY, LOW-NOISE (60-MINUTE OR LESS DURATION) CASSETTES. UPDATE FREQUENTLY USED FILES WITH A NEW CASSETTE EVERY MONTH OR SO.

For detailed information on your Aquarius™ Data Recorder™, check your Data Recorder Instructions.

## SAVING A FILE ON CASSETTE

OK. Suppose you've just named your address file ''nutrit'' (meaning nutrition plan for March and April, which you also summarized next to it)...and you're about to save it on a cassette containing five files.

Here is what you do:

**1.** REWIND the cassette tape to the beginning and reset the tape counter to zero.

**2.** Check your file log to find out what the end point is for the fifth (last) file saved on cassette. Suppose it is 116.

**3.** FAST FORWARD or REWIND the tape until you read 116 on the tape counter. Now advance the tape to 118, so there is a 2-digit separation between files. This is the load point for the file you're about to save. Write it down on your log!

**4.** Switch to the Command Mode on your FILEFORM screen, unless already there.

**5.** A quick glance at the Command Mode Help Menu tells you that CSAVE ''file'' is the command you need. Enter it properly on the Command Line:

```
CSAVE ''nutrit'' RTN
```

It doesn't matter whether you use lower case or upper case letters, or combinations of both, FILEFORM will understand!

**6.** If your command is INVALID (something went wrong), you'll hear a warning beep sound, and one of the following messages will be displayed on the Command Line for a few seconds:

```
What ?
Filename missing !
Incorrect filename !
```

The ''What ?'' message means that you have mistyped the word CSAVE. Retype it correctly, and you'll be back in business!

The ''Filename missing !'' message means that you have entered the file name without one or both of the enclosing quotation marks, or that you have entered the file name with more than 6 characters. Reenter the CSAVE command correctly.

**7.** If your command is VALID (if it's OK), FILEFORM will ask you (appearing on the Command Line) to do the following:

```
Press (RECORD). Press ∧C
```

Meaning, actually, press (PLAY) and (RECORD) simultaneously on your Data Recorder,™ then press CTL - C.

**8.** However, if after pressing CTL-C you have second thoughts about saving the address file (because you'd like to edit it some more and save it later), you can cancel the CSAVE command without erasing the contents of the file from the computer memory by doing the following:

[RST] [CTL]-[C]

Then pressing (STOP) on your Data Recorder.™

Depending on how long you waited to press [RST], you'll have a portion of the address file still saved on cassette — which you don't need now. But your computer memory will still retain the entire file (since the process of saving to cassette involves a copying, not a shifting, of information), which is what you're after!

**9.** Suppose your command is valid and you don't have second thoughts about saving your file. The computer begins saving your file. FILEFORM sends you the following message, in confirmation:

```
Saving NUTRIT
```

You will see an asterisk flashing in the upper right-hand corner of the screen, also in confirmation.

**10.** When saving is completed, you hear a final beep sound, and both the FILEFORM message and asterisk disappear. Press (STOP) on your Data Recorder.™

**11.** Check the tape counter reading and write it down on your log. Suppose it is 132. This is the end point of File "nutrit"!

Remember that although you've just saved a file on cassette, it STILL REMAINS STORED in MEMORY. If you want to erase it from memory, enter the NEW command in the Command Mode:

NEW RTN

(Note: FILEFORM will ask you first, "Are you sure?" To which you must press the Y key to confirm, or any other character key to change your mind)

Or use the FILEFORM reset key:

RST RTN

Or turn FILEFORM off!

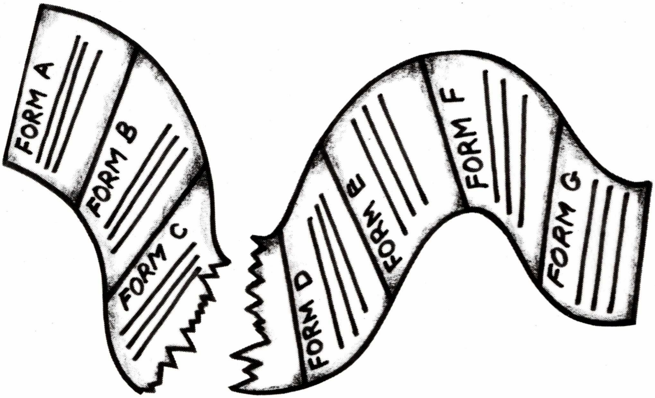
## SAVING BY ERASING ANOTHER FILE ON CASSETTE

Suppose you want to save File "nutrit" on a cassette containing 9 files, and you've decided to erase one of them which has no use to you anymore. Basically, the same procedures apply here. Except that you have to keep an eye on the tape counter when saving to ensure that the ending part of your new file doesn't erase the load point of the next file to be encountered. Quite possibly, your new file may be longer than the old file, and if you erase the load point of the old file, you can never reload it into Aquarius' memory!

If it looks like it's going to erase it, press STOP on your Data Recorder™. Then CANCEL the CSAVE command by doing the following:

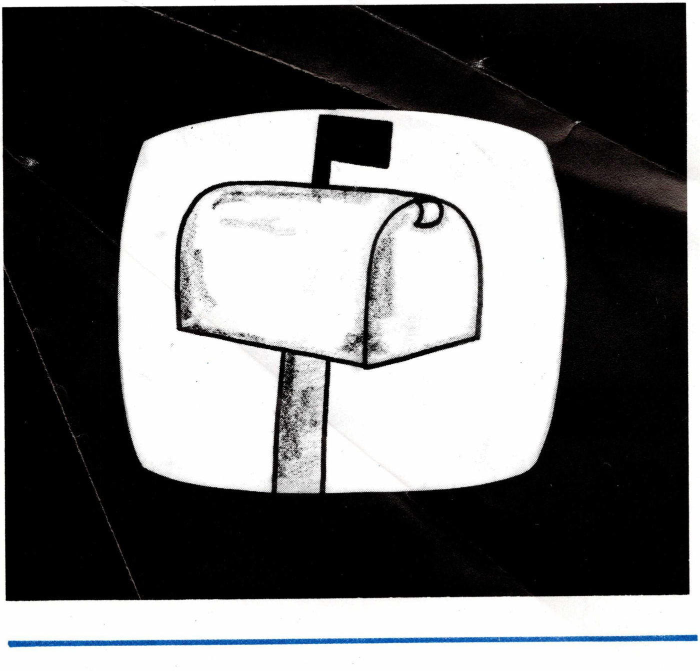
RST CTL-C (And not: RST RTN)

This way Aquarius' memory will retain the file you never finished saving!


FORM A
FORM B
FORM C
FORM D
FORM E
FORM F
FORM G

## CHAPTER 8

# LOADING A FILE INTO COMPUTER MEMORY FROM CASSETTE



In order to edit an address file that is stored on cassette, you first need to copy the address file into the computer memory.

You have two choices:

**A.** Load the address file into an EMPTY memory. This requires the use of the CLOAD command.

**B.** Append the address file to THE END of TEXT existing in memory. This requires the use of the READ command.

Unlike the CSAVE command, the CLOAD and READ commands don't require a file name. When you omit a file name, FILEFORM will copy into memory the first file encountered on tape. Of course, most of the time you will have to specify a file name...if you want to copy the right file.

Also, the CLOAD command, contrary to the READ command, ERASES the previous contents of memory — even if FILEFORM doesn't find or load a file.

Refer to Chapter 7 in this manual and to the Aquarius™ Data Recorder Instructions for additional information.

## LOADING AN ADDRESS FILE BY ERASING WHAT WAS STORED IN MEMORY

Suppose a week after you saved File "dancit" on cassette, you want to load it again into the computer memory so you can update your records. And you've just decided you WILL ERASE the text you've been working on for the past hour. Here is what you do:

1. Read the load point and end point from your log for "dancit".

Load Point: 124        End Point: 157

2. REWIND the cassette tape to the beginning and reset the tape counter to zero.

3. FAST FORWARD or REWIND your cassette until the number 124 (load point) appears on the tape counter. Remember that in order to load the contents of a file, FILEFORM has to be able to read the file name RECORDED AT THE LOAD POINT for the file. If you erase or write over the load point for the file, FILEFORM doesn't recognize the remaining information in the file — up to the next load point! To ensure that FILEFORM will read the load point, you might want to back up 1 or 2 digits to 123 or 122, instead of 124.

4. Switch to the Command Mode, if not there already, and enter the CLOAD command properly:

```
CLOAD "dancit" RTN
```

The moment you press RTN, the contents of memory are ERASED. If for any reason you wish to CANCEL the CLOAD command, press RST.

5. If the command is invalid, you'll hear a warning beep sound, and one of the following messages will be displayed on the Command Line for a few seconds:

```
What ?
Incorrect filename !
```

The "What ?" message means that you have mistyped the word CLOAD. Retype it correctly, and you'll be back in business!

The "Incorrect filename !" message means that you have entered the file name without one or both of the enclosing quotation marks, or that you have entered the file name with more than 6 characters. Reenter the CLOAD command correctly.

**6.** If the command is valid, FILEFORM will ask you (appearing on the Command Line) to do the following:

```
Press (PLAY), Press [^C]
```

In practice we recommend pressing [CTL]-[C] first, then PLAY, because FILEFORM doesn't begin searching for the file until you press [CTL]-[C] and, with the tape in motion already, FILEFORM may miss reading the load point for the file.

**7.** FILEFORM will display the following message on the Command Line to remind you that it is SEARCHING for your file:

```
Searching
```

Also, it will display a Skip message on the Command Line for each file whose name doesn't match the name specified in the CLOAD command you entered. For instance, now it is skipping over a file called "nytrip":

```
Skip NYTRIP
```

Note how FILEFORM automatically translates your lower case letters into upper case letters.

The Skip message will remain on the screen until FILEFORM reads the next file name on tape. FILEFORM will skip over other files NOT CREATED by FILEFORM, such as BASIC programs, FINFORM files, etc., WITHOUT displaying the file name.

8. FILEFORM will inform you, with a Found message, the moment it encounters the load point for your file. Right now it encountered "dancit" at 124:

```
Found DANCIT
```

9. LOADING into memory begins!

10. As the file is being loaded into memory, the Found message remains on the screen and an asterisk flashes in the upper right-hand corner of the screen.

11. If you run out of memory while your address file is being loaded (that is, if your file is larger than the available memory), you'll hear a beep sound and see the following message:

```
Out of memory !
```

This message indicates that you CANNOT LOAD ANYMORE text. Text already loaded will remain in memory until you decide to erase it. Of course, the same text will remain on cassette too. So there's no need to worry.

Press (STOP) on your Data Recorder™, then press RTN to remove the message from the Command Line. Then find out whether the text just loaded will allow you to edit what you had in mind.

12. Suppose you never ran out of memory. LOADING is COMPLETED when you hear a beep sound and both the asterisk and the Found message disappear.

13. Press (STOP) on your cassette recorder. The tape counter should read 157 (end point).

Now you can edit your address file with FILEFORM!

**14.** If on the other hand FILEFORM detected an ERROR in loading your address file, FILEFORM would alert you with this message:

```
Checksum error!
```

Press RTN to remove the message.

Then, reenter the CLOAD command.

## LOADING BY APPENDING TO THE END OF TEXT IN MEMORY

When you use the READ command, you copy your address file from cassette into memory, and append the address file to the end of the existing text.

By using the READ command, you can assemble a LONG document in memory from small documents or segments stored on cassette.

When the Insert Mode cursor is positioned WITHIN the body of text, the document is APPENDED to the end of text, STARTING immediately after LAST CHARACTER of text.

When the Insert Mode cursor is positioned AFTER the end of text, the document read into memory is APPENDED to the end of text, STARTING at CURSOR POSITION.

You may want to append the new text one or more lines after the end of text, starting at cursor position. One way to do it is following these steps:

1. Switch to the Edit Mode.

2. Move the cursor down to the bottom (last line and character) of the text stored in memory by entering the B command:

B [RTN]

3. Switch to the Insert Mode by entering the I command:

I [RTN]

To insert 2 lines, for example, between the cursor and the end of text stored in memory, you first have to move the cursor one space to the right of the last character. A quick glance at the Insert Mode Help Menu tells you that the CTL-D key will do that for you.

4. Press [CTL]-[D].

5. Press [RTN] twice to position the cursor 2 lines below the last line of text.

Now you're ready to append new text from cassette! You're ready to LOAD!

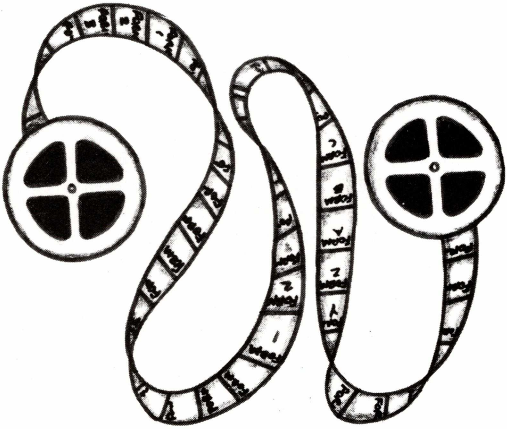
6. Basically, loading procedures from here on are similar to the procedures discussed before. Except that at the end you will have two text matters or files combined in memory, which will have to be saved later on cassette as one piece and under a unique name!

# SAVING AND LOADING AT THE RIGHT PITCH!

FILEFORM can save and load address files on almost any cassette recorder.

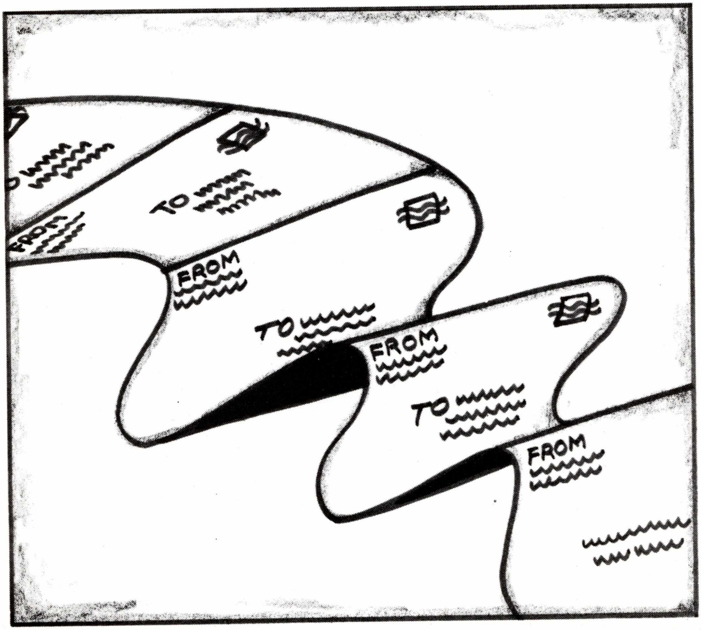
If you have trouble saving or loading a file on cassette, try adjusting the TONE and VOLUME slightly on your cassette recorder. Usually, the volume should be midway between maximum and minimum. However, some cassette recorders work best when the volume is at maximum and the tone at minimum.

When you use the Aquarius™ Data Recorder™, the volume and tone are preadjusted for you. In addition, the Aquarius™ Data Recorder™ is designed to record and play back information AT THE RIGHT PITCH!



## CHAPTER 9

# PRINTING A FILE


TO
FROM
TO
FROM
TO
FROM
TO
FROM

To print anything you must be in the Command Mode.

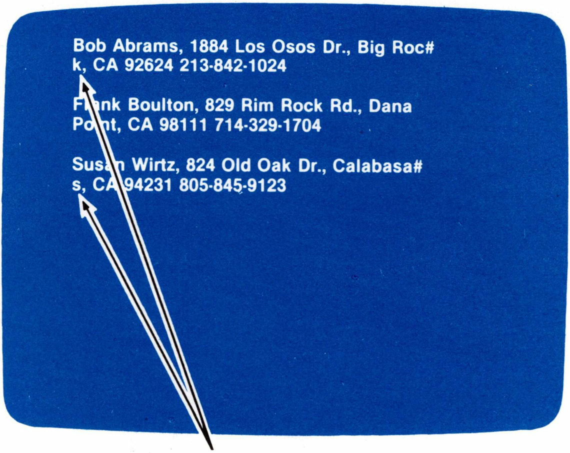
To print, enter the PRINT command on the Command Line, like this:

PRINT [RTN]

Your 40-column Aquarius™ Printer™ will automatically print for you. It will print 38 text characters per line and 60 lines per page, unless told to print differently.

Here is an example of your address file intended to be printed:

**What You See On Your Screen:**



```
Bob Abrams, 1884 Los Osos Dr., Big Roc#
k, CA 92624 213-842-1024

Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111 714-329-1704

Susan Wirtz, 824 Old Oak Dr., Calabasa#
s, CA 94231 805-845-9123
```

THE "k" OF ROCK AND THE "s" OF CALABASAS HERE ARE ADVANCED TO THE BEGINNING OF THE NEXT LINE.

Enter the PRINT command now:

```
PRINT RTN
```

**What You Get On Your 40-column Printer Paper:**

```
Bob Abrams, 1884 Los Osos Dr., Big
Rock, CA 92624 213-842-1024

Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111 714-329-1704

Susan Wirtz, 824 Old Oak Dr.,
Calabasas, CA 94231 805-845-9123
```

*The entire words Rock and Calabasas here are automatically advanced to the beginning of the next line by FILEFORM!*

As an extra thing, FILEFORM automatically prints a page number (after skipping a line) at the end of each page. Page numbers run sequentially starting with 1, unless programmed differently, and are centered on the page.

**Example:**

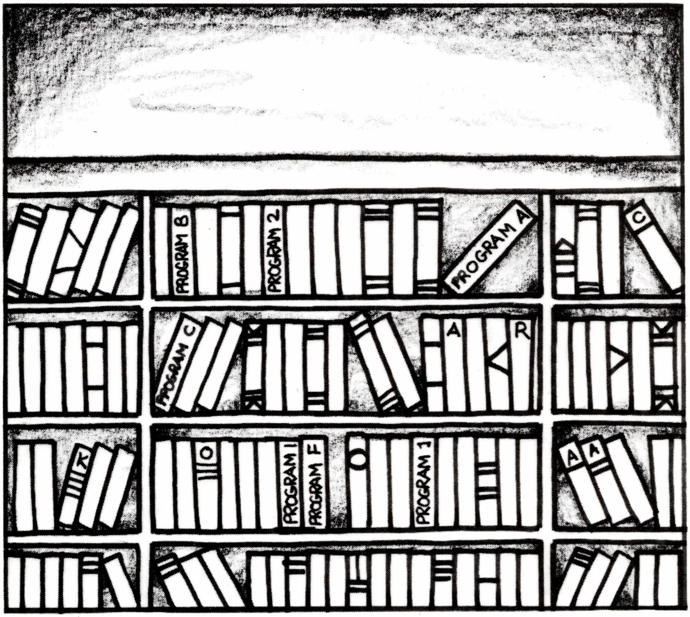
1 ← 40-column page → 40

```
John M. Dalton
456 Old Pine St.
Austin, Texas 77082

                 Page 6

Gail Barrington
1795 Jefferson Ave. Apt. B
Bronx, New York 10477
```

*Supposing you've reached the end of page 6 with this line!*

Refer to Appendix E for FILEFORM print-time options, original selections, and alternative selections. Also, for details on the use of the INIT command.

# APPENDIX


PROGRAM B
PROGRAM 2
PROGRAM A
C
PROGRAM C
A
R
PROGRAM I
PROGRAM F
PROGRAM 1
A
A

# APPENDIX A
# COMMAND MODES COMMANDS

| SYMBOL | DESCRIPTION |
|---|---|
| **EDIT** | Enters the Edit Mode |
| **INSERT** | Enters the Insert Mode |
| **CLOAD "file"** | Loads file into memory from cassette |
| **CSAVE "file"** | Saves file on cassette from memory |
| **READ "file"** | Appends file to file in memory from cassette |
| **NEW** | Erases current file in memory |
| **FREE** | Displays amount of free memory (in bytes) |
| **INIT** | Initiates selection for new print-time options |
| **LIST** | Lists on screen current file in memory |
| **PRINT/n** | Print on paper n duplicates of file |

## Control Keys

| SYMBOL | DESCRIPTION |
|---|---|
| **CTL-S** | Stops printer temporarily |
| **CTL-U** | ERASES entire Command Line, or cancels printing |
| **CTL-H** | DELETES CHARACTER to the left of cursor (same effect as left arrow key: RUB OUT) |

# APPENDIX B
# INSERT MODE AND EDIT MODE CONTROL KEYS

| SYMBOL | DESCRIPTION |
|---|---|
| **CTL-E** | Moves cursor up one line |
| **CTL-X** | Moves cursor down one line |
| **CTL-S** | Moves cursor left one character |
| **CTL-D** | Moves cursor right one character |
| **CTL-A** | Moves cursor LEFT to beginning of next WORD |
| **CTL-F** | Moves cursor RIGHT to beginning of next WORD |
| **CTL-H** | DELETES CHARACTER to the LEFT of cursor (same effect as left arrow key: RUB OUT) |
| **CTL-G** | DELETES CHARACTER in current cursor position |
| **CTL-Y** | DELETES LINE in which cursor appears |
| **CTL-I** | TABS to every 8th position |
| **CTL-W** | SCROLLS text UP 1/2 screenful |
| **CTL-Z** | SCROLLS text DOWN 1/2 screenful |
| **CTL-U** | ERASES entire Command Line |
| **CTL-P** | Displays the Insert Mode HELP Menu when in the Insert Mode, or displays the Edit Mode HELP Menu when in the Edit Mode |
| **CTL-C** | Exits from Insert Mode to Edit Mode, or exits from Edit Mode to Command Mode; after pressing RTN: WARM STARTS FILEFORM |
| **CTL-V** | Exits from Insert Mode to COMMAND Mode, or exits from Edit Mode to COMMAND Mode |

Press RTN to exit Insert Mode Help Menu

# APPENDIX C
# EDIT MODE COMMANDS

| SYMBOL | DESCRIPTION |
|---|---|
| **I** | Enters the Insert Mode |
| **T** | Moves cursor to top (beginning) of file |
| **B** | Moves cursor to bottom (end) of file |
| **F/string/** | Searches for the string in memory from cursor to end of file |
| **F-/string/** | Searches for the string in memory from character left of cursor to beginning of file |
| **C/string 1/string 2/n** | Replaces string 1 with string 2 in memory starting from cursor to end of file in n places |
| **C-/string 1/string 2/n** | Replaces string 1 with string 2 in memory starting from character left of cursor to beginning of file in n places |
| **K** | Deletes text from cursor to end of paragraph (a paragraph being the text between 2 RTN's) |
| **K-** | Deletes text from character left of cursor to beginning of paragraph (a paragraph being the text between 2 RTN's) |
| **S** | Moves text into memory's Save Buffer |
| **R** | Retrieves text from memory's Save Buffer |

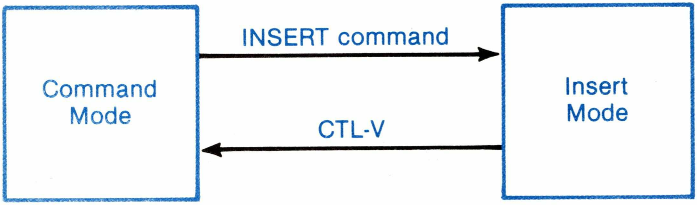
## Control Keys

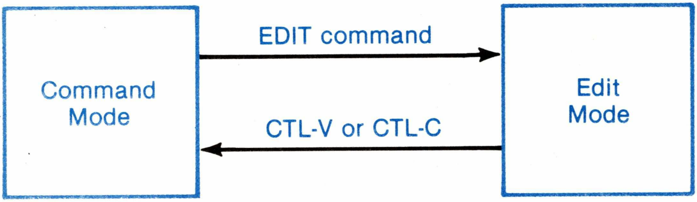
Control keys are the same as those used in the Insert Mode. Exit to Insert Mode, and press CTL-P to reach Insert Mode HELP Menu.

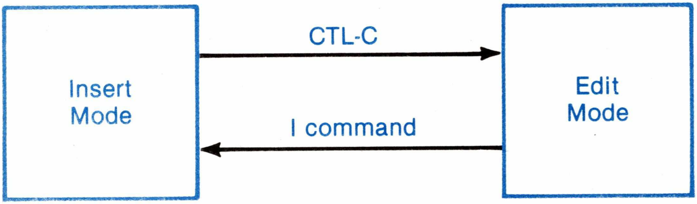
Press CTL-P to reach Edit Mode HELP Menu when in Edit Mode.

Press RTN to exit Edit Mode HELP Menu.

# APPENDIX D
# SWITCHING FILEFORM MODES


Command Mode
INSERT command
CTL-V
Insert Mode


Command Mode
EDIT command
CTL-V or CTL-C
Edit Mode


Insert Mode
CTL-C
I command
Edit Mode

# APPENDIX E
# GROWING WITH FILEFORM

## CREATING AN ADDRESS FILE

### Continuous Style:

```
Bob Abrams, 1884 Los Osos Dr., Big Roc#
k, CA 92624 213-842-1024 ** Julie Ackm#
an, 3426 Rose St., #6, Culver City,
CA 90357 213-399-0145 [RTN] [RTN]
```

*Notice that the text automatically wraps around the screen. In this case you chose to press RTN at the end of the second record. Then you pressed RTN once to skip a line.*

### Indented Style:

```
Bob Abrams [RTN]
  1884 Los Osos Dr. [RTN]
  Big Rock, CA 92624 [RTN]
  213-842-1024 [RTN] [RTN]

Julie Ackman [RTN]
  3426 Rose St., #6 [RTN]
  Culver City, CA 90357 [RTN]
  213-399-0145 [RTN] [RTN]
```

*Here you pressed SPACE twice at the beginning of each line after the first time in an entry.*

*This will cause the lines to be indented.*

# EDITING YOUR FILE

## Watching the Text Cursor Move!

Suppose that you have typed this much of an address record on the text area of the screen:

```
Frank Boulton, 829 Rim Rock Rd.■
```

Looking at the bottom of the screen, where the green margin is, you read the following:

```
INSERT:                    LINE= 1                    COL=32
```

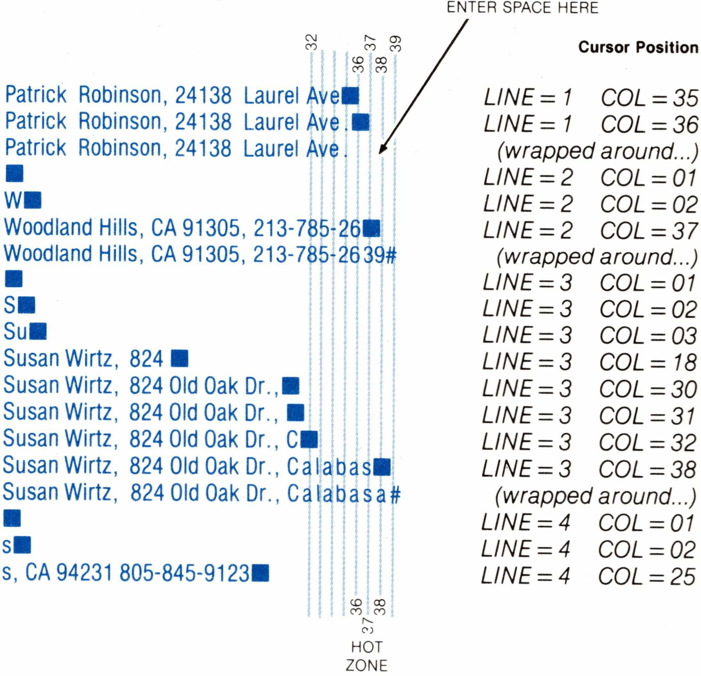
Here is what happens. As the cursor moves, the LINE and COL indicators on this green margin give you the current line and column position of the cursor. Lines are numbered sequentially from 1 to last number used in the file, from top to bottom of the screen. There are 23 lines per screenful. Columns are numbered from 1 to 38, from left to right. In this example the cursor is positioned on line 1 and column 32.

If you want to continue typing words on this line, you'll notice that as soon as you type *Dana,* the cursor DOESN'T continue moving to the right on this line, but jumps down to the beginning of the next line (LINE = 2), like this:

```
Frank Boulton, 829 Rim Rock Rd., Dana
■
```

The reason is that FILEFORM is programmed to make the cursor do that anytime the cursor encounters a space on column 36, 37, or 38! If the cursor doesn't encounter a space, it will continue moving to the right until it hits column 38. After that, FILEFORM will automatically break the word, typing for you a # sign on column 39. It will also advance the cursor to the beginning of the next line (action called "screen wraparound") so you can continue typing.

Check the following examples, where the cursor is always moving to the right (except when wrapping around the screen), to illustrate what we've just said:



| | **Cursor Position** |
|---|---|
| Patrick Robinson, 24138 Laurel Ave■ | *LINE=1 COL=35* |
| Patrick Robinson, 24138 Laurel Ave.■ | *LINE=1 COL=36* |
| Patrick Robinson, 24138 Laurel Ave. | *(wrapped around...)* |
| ■ | *LINE=2 COL=01* |
| W■ | *LINE=2 COL=02* |
| Woodland Hills, CA 91305, 213-785-26■ | *LINE=2 COL=37* |
| Woodland Hills, CA 91305, 213-785-2639# | *(wrapped around...)* |
| ■ | *LINE=3 COL=01* |
| S■ | *LINE=3 COL=02* |
| Su■ | *LINE=3 COL=03* |
| Susan Wirtz, 824 ■ | *LINE=3 COL=18* |
| Susan Wirtz, 824 Old Oak Dr.,■ | *LINE=3 COL=30* |
| Susan Wirtz, 824 Old Oak Dr., ■ | *LINE=3 COL=31* |
| Susan Wirtz, 824 Old Oak Dr., C■ | *LINE=3 COL=32* |
| Susan Wirtz, 824 Old Oak Dr., Calabas■ | *LINE=3 COL=38* |
| Susan Wirtz, 824 Old Oak Dr., Calabasa# | *(wrapped around...)* |
| ■ | *LINE=4 COL=01* |
| s■ | *LINE=4 COL=02* |
| s, CA 94231 805-845-9123■ | *LINE=4 COL=25* |

On hardcopy printout, however, the printer will automatically print a word that cannot be completed on the current line, at the beginning of the next line. Thus, doing away with the # sign.

## UNDERSTANDING THE ENCAGED SNAKE!

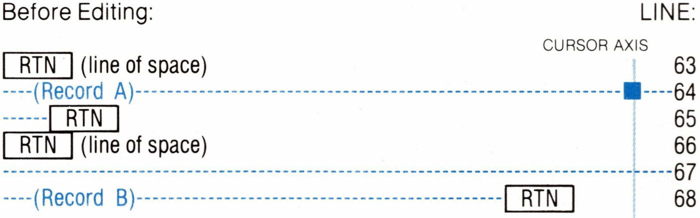
You must realize that every time you press a carriage return (RTN), as you enter an address record in a file, you automatically enclose the record (or record part) between this RTN and the RTN that preceded it. These two RTN's were executed at the time of typing the record, and although they're invisible to you now, they're still there encaging the record.

As you insert or delete characters in two or more lines comprising a record enclosed by two RTN's, the lines VISUALLY behave as if they were an ever-stretching or -shrinking SNAKE. The snake wraps around the screen, so to speak, making up for the insertion or deletion, using up more or less lines between the two RTN's.

Logically, the next record in the file won't be affected internally by the changes. The next record will have its own ENCAGED SNAKE to worry about!

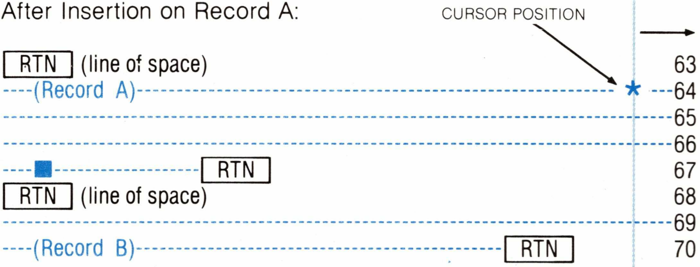
Consider, for example, Record A and Record B separated by a line of space, and editing will be performed on Record A only. Each record is enclosed between two RTN's.

Before Editing:


LINE:
CURSOR AXIS
RTN (line of space) 63
----(Record A)----64
------RTN 65
RTN (line of space) 66
----67
----(Record B)----RTN 68

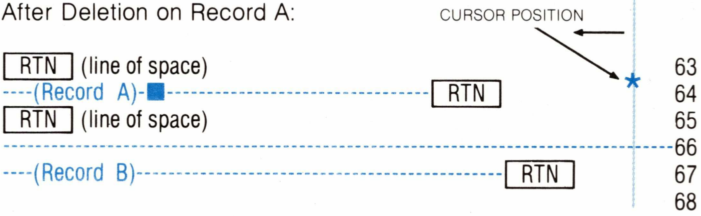
*Record A comprises lines 63, 64 and 65.*

After Insertion on Record A:


CURSOR POSITION
RTN (line of space) 63
----(Record A)---- * ---64
----65
----66
----■----RTN 67
RTN (line of space) 68
----69
----(Record B)----RTN 70

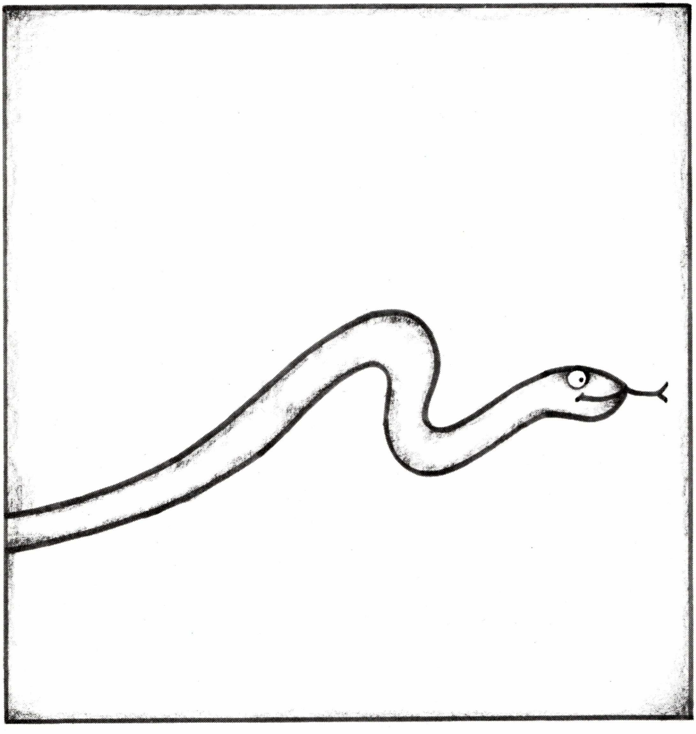
*Here all characters inserted moved to the right starting with the cursor position. Insertion filled out extra lines (66 & 67).*

After Deletion on Record A:


CURSOR POSITION
RTN (line of space) 63
----(Record A)-■----RTN * 64
RTN (line of space) 65
----66
----(Record B)----RTN 67
68

*Here all characters deleted moved to the left starting with the cursor position. Deletion on line 64 confined Record A to line 64 only*

In general, when you insert characters in a record enclosed by two RTN's, all characters starting with the cursor position get pushed to the right and, when supposed to, advanced to the beginning of the next line, in a snake-like fashion. When you delete characters, all characters starting with the cursor position get pushed to the left, the snake moving in reverse. (Watch how the word ''Calabasas'' in all of our examples in this manual wraps around the screen in ever-changing ways!)



## PRINT-TIME OPTIONS AND SELECTIONS

| Print-Time Option | Original Selection | Alternative Selection* |
|---|---|---|
| Printer line width | 38 columns | 16 to 131 columns |
| Lines per page | 60 lines | 6 to 127 lines |
| Right justification | No right justification: a word is printed starting in column 1 on the next line when it cannot be completed on the current line | Lines right-justified: documents are printed with an even right margin. FILEFORM automatically causes the printer to insert extra spaces between words to fill out lines to the right margin. Lines that terminate in an RTN are not right-justified |
| Stop printing at page breaks | Print document continuously. Normal printer mode for your Aquarius printer | Stop printing at end of each page. Continue when you press a character key. This option allows you to use printers that feed paper a sheet at a time |

* Obtained through the use of the INIT command.

| | | |
|---|---|---|
| Print page numbers | Print page numbers at the bottom of each page. | Omit page numbers |
| Specify starting page number | Starting page number is 1 | Paginate document starting with specified number from 1 to 249 |

When you initially power up your system, or press RST and RTN, FILEFORM automatically places you in the options tabulated under Original Selection.

To change the options, you must enter the INIT command and go through a series of prompts (FILEFORM's requests) *before* you enter the PRINT command!

Once changed, these options remain in effect until you change them again, or until you power down your system, or press RST and RTN.

## SUBMITTING A PRINT REQUEST USING THE ORIGINAL SELECTION

1. Ensure that the printer is turned on and loaded with enough paper to print your entire document.

2. From the Command Mode, enter the PRINT command:

```
PRINT RTN
```

While a document is being printed, you cannot use FILEFORM to create or edit text. Watch the following message appear on the Command Line:

```
Printing
```

**3.** To print more than 1 copy of your document, enter a slash and the total number of copies to be printed, up to 255. For example, to print 7 copies:

PRINT/7 RTN

After the first copy of your document is printed, watch FILEFORM's changing messages appear:

| | |
|---|---|
| Printing 6 | *(after first printed copy, 6 remain!)* |
| Printing 5 | *(after second printed copy, 5 remain!)* |

And so on.

**4.** Note how FILEFORM automatically skips a line and prints the page number every 60 lines (every page), leaving thus 58 lines of usable text.

**5.** To temporarily halt the printer, press CTL-S. You may have to press CTL-S several times to catch the printer's attention.

**6.** To resume printing, press any key except RST, CTL, or SHIFT.

**7.** When printing is completed, FILEFORM's Printing message on the Command Line disappears. Enter the next command to continue work!

# SUBMITTING A PRINT REQUEST USING AN ALTERNATIVE SELECTION

Before you submit the print request (enter the PRINT command), you must change the print-time options by entering the INIT command.

**1.** From the Command Mode, enter the INIT command:

```
INIT [RTN]
```

Watch the first of several prompts appear on the screen:

```
    -- SET INITIAL VALUES --
PRINTING FORMAT
Line Width = 38
```

**2.** Suppose you want to change 38 (your first original option) to 24, just type 24. Each digit you type will cover each digit shown, from left to right, pushing a gray cursor to the right. Here is what you get:

```
    -- SET INITIAL VALUES --
PRINTING FORMAT
Line Width = 24■
```

Refer to the Note in Step 10 to change or correct a number just typed.

When you enter numbers less than 16 or greater than 131, FILEFORM sounds a beep and erases the number that you entered. Also, it briefly displays the "Out of range !" message. Reenter the Line Width.

While the cycle of prompts continues, the cursor remains to the right of the number entered.

To move along to the next prompt, whether you decided to change 38 or not, press RTN.

**3.** Next, FILEFORM prompts you to select the page length, in lines.

```
Lines per page = 60
```

Note that from now on all previous reviewed prompts will remain on the screen for you to observe while the cycle of prompts continues.

**4.** Suppose you want to change 60 (your next original option) to 85, just type 85. A new gray cursor will be pushed to the right as you type the replacement number:

```
Lines per page = 85■
```

Refer to the Note in Step 10 to change or correct a number just typed.

When you enter numbers less than 6 or greater than 127, FILEFORM sounds a beep and erases the number that you entered. Also, it briefly displays the ''Out of range !'' message. Reenter the Lines per Page.

While the cycle of prompts continues, the cursor remains to the right of the number entered.

To move along to the next prompt, whether you decided to change 60 or not, press RTN. (If the number you entered is valid and has 3 digits, the next prompt will come to you automatically, without having to press RTN.)

**5.** Next, FILEFORM prompts you to select the "Centering" or right-margin justification. Do you want FILEFORM to insert extra spaces between words in each line so the printed document appears with a straight right margin?

```
Centering (Y/N) ? =N
```

Note that the N (No) choice already appears here. Although, it could've been a Y (Yes) — had the Y been in effect from a previous selection.

**6.** Suppose you want to have right-margin justification, just type Y (upper or lower case). The Y will automatically replace the N and place you in the next FILEFORM's prompt. If you don't want to have right-margin justification (original option), just press RTN to accept the N and go to the next FILEFORM's prompt. If you don't want to have right-margin justification but the Y, instead of the N, is in effect, then type N and get automatically advanced to the next prompt.

Refer to the Note in Step 10 to change or correct a letter (Y or N) just typed.

**7.** You are in the next FILEFORM's prompt:

```
Stop printing at page breaks (Y/N) ? =N
```

This option allows you to use printers in which you feed individual sheets of paper. If you select Y (type Y and get advanced to the next prompt), later on, upon entering the PRINT command, printing will automatically stop at page breaks. Then, it will be your choice to insert a fresh sheet of paper to continue. FILEFORM will prompt you this way:

```
Strike a key to continue
```

Meaning, press any key except RST, CTL, or SHIFT!

Normally, however, when you use your Aquarius™ Printer™, you want documents to be printed continuously from beginning to end. Accept the N by pressing RTN and get advanced to the next prompt.

Refer to the Note in Step 10 to change or correct a letter (Y or N) just typed.

**8.** You are then prompted whether or not you want page numbers to be printed at the bottom of each page:

```
Print page numbers (Y/N) ?=Y
```

**9.** You are in the next prompt:

```
Set start page number (Y/N) ? =N
```

If you want page numbers to start with 1 (your original option), press RTN to accept and get advanced to the next prompt. If you want page numbers to start with any number from 1 to 249, type Y and get advanced to the next prompt. Later, upon entering the PRINT command, FILEFORM will prompt you again, this way:

```
Start page number=
```

And then you'll have your chance to specify the starting page number you want. (If you accidentally type a number greater than 254, FILEFORM will sound a beep. Press RST and CTL-C to start over without erasing the document currently in memory.) Note that pages after page 255 are numbered starting with zero.

Refer to the Note in Step 10 to change or correct a letter (Y or N) just typed.

**10.** You are in the next prompt:

```
Are these values correct ?
```

This final prompt gives you a chance to change your mind. Press Y to accept all the values typed so far and exit to the Command Mode. Or press RTN to start over and change anything you want. (The next cycle of prompts will display those numbers or letters you have just selected.)

**NOTE:** To change or correct a number or letter (Y or N) typed during any of the preceding prompts, press RTN successively until the last prompt ("Are these values correct ?") appears. Then type N and get recycled to the first prompt. Values entered will remain in effect until you change them.

## SHIFTING BLOCKS OF INFORMATION

FILEFORM can help you edit your text by shifting around blocks of up to 254 characters (about 7 lines of text) at a time.

Here's the plan: Enter the S command in the Edit Mode to shift text into an area of memory called the "Save Buffer." Move the text cursor to the location where you want text to be shifted to begin. Enter the R command in the Edit Mode to retrieve text from the "Save Buffer" and make it begin where indicated. Here are the tools: Enclose text to be shifted between three pound signs (###) and the cursor.

Suppose that you have an address file in which address records are not in alphabetical order, like this:

```
Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111 714-329-1704

Bob Abrams, 1884 Los Osos Dr., Big Roc#
k, CA 90123 213-842-1024

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90145 213-645-1239
```

You would like Abrams' address to precede Boulton's. How about shifting Boulton's address into the Save Buffer with the S command and then retrieving it with the R command to shift it exactly where you want it to go? Here's how you do it:

**1.** In the Insert Mode, insert three pound signs (###) at the beginning of the text to be shifted. This is done by placing the cursor over the "F" of Frank and typing ###. Then, move the cursor to the right of the last character to be shifted. Like this:

```
###Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111 714-329-1704■
```

Or better yet — if you want to pick up the RTN between Boulton's address record and Claybourn's, so you can have a line of space — move the cursor over to the "B" of Bob Abrams, like this:

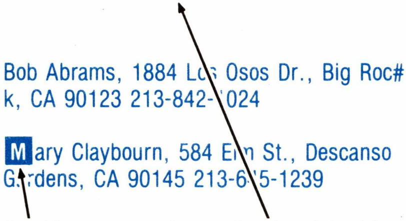
```
###Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111 714-329-1704

Bob Abrams, 1884 Los Osos Dr., Big Roc#
k, CA 90123 213-842-1024
```

**2.** Switch to the Edit Mode. Enter the S command to shift Boulton's address into the Save Buffer:

S RTN

Watch the ### disappear as the address is shifted into memory.

**3.** Position the cursor where you want the address returning from memory to begin:



```
Bob Abrams, 1884 Los Osos Dr., Big Roc#
k, CA 90123 213-842-1024

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90145 213-615-1239
```

*Position cursor here. Boulton's address is absent here.*

Note that historically each address record was ended with an RTN, and separated from the next with another RTN.

**4.** Enter the R command to retrieve Boulton's address from memory:

R RTN

The address appears starting at the cursor position as though you were entering it from the keyboard:

```
Bob Abrams, 1884 Los Osos Dr., Big Roc#
k, CA 90123 213-842-1024

Frank Boulton, 829 Rim Rock Rd., Dana
Point, CA 98111 714-329-1704

Mary Claybourn, 584 Elm St., Descanso
Gardens, CA 90145 213-645-1239
```

# 90 DAY LIMITED WARRANTY

Mattel Electronics warrants to the original consumer purchaser of any AQUARIUS™ cartridge, cassette, or disc it manufactures that the product will be free of defects in material or workmanship for 90 days from the date of purchase under normal in-home use.

Mattel Electronics will not assume any liability or responsibility for loss or damage, direct or indirect, caused by or alleged to be caused by any Aquarius cartridge, cassette, or disc (software programs) or the use made of any such program by the consumer. This disclaimer includes but is not limited to any interruption of service, loss of money, or anticipatory profits resulting from the use of operation of such programs.

Mattel Electronics sole obligation under this warranty will be to repair or replace the defective product, at its option. If defective, return the cartridge, cassette or disc along with proof of the date-of-purchase to either your local dealer or postage prepaid to:

Mattel Electronics Service Center (East)
10 Abeel Road
Cranbury, New Jersey 08512

or

Mattel Electronics Service Center (West)
13040 East Temple Avenue
City of Industry, California 91746

This warranty excludes incidental or consequential damages resulting from the product or use of the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.)

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. This warranty does not cover damage resulting from purchaser abuse, accident, negligence, or damages subsequent to purchase.

AQUARIUS™
HOME COMPUTER SYSTEM

MATTEL ELECTRONICS®